

**REMARKS****Phone Interview**

Applicant would like to thank the Examiner and her Supervisor for their time spent in discussing the case over the telephone and for the helpful suggestions for amending the claims to place the application in condition for allowance.

**Status of the Claims**

Claims 17 and 105-127 are pending in the instant application. Claim 17 has been indicated by the Examiner as being allowable. Claims 1-16 and 18-104 have been cancelled without prejudice or disclaimer of the subject matter claimed therein. New claims 105-127 replace the canceled claims 18, 80-94, 97, 101, 102, and 104

**Amendments to the Specification**

The specification has been amended to correct inadvertent typographical errors. The amendments to the specification do not introduce new matter.

**Amendments to the Claims**

New claims 105-127 have been added to replace canceled claims 18, 80-94, 97, 101, 102, and 104. The new claims do not introduce prohibited new matter. Support for the new claims can be found as summarized below.

Claim	Support
105-108	Original claim 80
109	Original claim 81
110	Original claim 82
111	Original claim 83
112	Original claim 84
113	Original claim 85
114	Original claim 86

115	Original claim 87
116	Original claim 88
117	Original claim 89
118	Original claim 90
119	Original claim 91
120	Original claim 92
121	Original claim 93
122	Original claim 97
123	Original claim 18
124	Original claim 94
125	Original claim 104
126	Original claim 101
127	Original claim 102

Rejection Under 35 U.S.C. § 112, First Paragraph, Written Description

Claims 18, 80-85, 88-94, 97, 102, and 104 are rejected under 35 U.S.C. 112, first paragraph, as purportedly failing to comply with the written description requirement.

A. Claims 18 and 97 were rejected purportedly because they are drawn to proteins which minimally comprise the peptides of SEQ ID NO: 4 and SEQ ID NO: 3.

Claims 18 and 97 have been canceled without prejudice or disclaimer of the subject matter claimed therein. New claims 122 and 123 replace claims 97 and 18, respectively. Since new claims 122 and 123 depend from claim 105, 106, and 108, claims 122 and 123 include the limitations that are recited in claims 105, 106, and 108. The cited abstracts, Aziz *et al.*, Dumas *et al.*, and Bennett *et al.*, do not disclose a polypeptide that meet the limitations of these claims. Accordingly, Applicant respectfully requests withdrawal of the rejection.

B. Claim 80 was rejected purportedly because it is drawn to variant polypeptides encoded by polynucleotides which hybridize to the open reading frame of SEQ ID NO: 35.

Claim 80 has been canceled without prejudice or disclaimer of the subject matter claimed therein. Claim 80 has been replaced with new claims 105-108 to clarify the claimed invention.

Claims 105-108 are directed to polypeptides that inhibit cellular apoptosis and are encoded by a nucleic acids that hybridize under the specified conditions to the open reading frame (ORF) of SEQ ID NO: 35, which encodes SEQ ID NO: 34.

The Examiner states that the arginine residue at position 37 is not accounted for in the recited nucleic acid regions. A review of the nucleotides encoding the open reading frame indicates that the arginine residue at position 37 is encoded by nucleotides 2919-2921.

Claims 105-108 recite specific hybridization conditions. Accordingly, claims 105-108 are limited to polypeptides encoded by nucleic acids that hybridize to the ORF of SEQ ID NO: 35 under the recited conditions. The claimed polypeptides are adequately described in the specification. The nucleic acid sequence and the hybridization conditions recited in the claims provide the structural limitations for the polypeptides encompassed by the claims. The claims also include functional limitations for the claimed polypeptides. Applicant respectfully requests withdrawal of the rejection.

C. Claim 104 was rejected purportedly as new matter.

Claim 104 has been canceled and is replaced with new claim 125. New claim 125 is directed to a fusion protein comprising a survivin protein and a C-terminal RING finger domain which is present in most IAP proteins, but not in survivin. This fusion protein is described in Example 12 on page 63, lines 23-26. Further, Figure 12 shows that the survivin/RING fusion protein is functionally active. In fact, compared to the other survivin mutants, it is almost as active as the wild-type survivin protein in protecting BaF3 cells from apoptosis induced by IL-3 withdrawal. Thus, the fusion protein of claim 125 is adequately described by the specification. Neither claim 125 nor cancelled claim 104 is not directed to new matter. Applicant respectfully requests withdrawal of the rejection.

Rejection Under 35 U.S.C. § 112, First Paragraph, Enablement

Claims 18, and 97 are rejected under 35 U.S.C. 112, first paragraph, purportedly because the specification is enabling only for SEQ ID NO: 34 and for peptides consisting of SEQ ID NO: 3.

Claims 18 and 97 have been cancelled without prejudice or disclaimer of the subject matter claimed therein. New claims 122 and 123 which replace claims 18 and 97 are dependant from claims 105, 106, and 108. Claims 122 and 123 include the limitations recited in claims 105, 106, and 108. In view of the cancellation of claims 18 and 97 and the limitations included in the new claims, the rejection is now moot. Applicant respectfully requests withdrawal of the rejection.

#### Rejection Under 35 U.S.C. § 102(b)

Claims 80-82 and 92 are rejected under 35 U.S.C. § 102(b) as being anticipated by Roy *et al.* as evidence by NCBI Conserved Domain Summary NAID.

Applicant notes that a copy of the NCBI Conserved Domain Summary NAID was not attached to the Office Action. Applicant's representative has telephoned the Examiner to request a copy of the document, but Examiner has not provided a copy of the document.

Claims 80-82 and 92 have been canceled without prejudice or disclaimer of the subject matter claimed therein. Claims 80-82 and 92 have been replaced with new claims 105-110 and 121. New claims 105-110 and 121 are directed to polypeptides that are encoded by nucleic acids that hybridize under the recited conditions to the open reading frame of SEQ ID NO: 35 or to the nucleic acid encoding SEQ ID NO: 34. Roy *et al.* do not disclose a polypeptide encoded by a nucleic acid that hybridizes under these conditions to the open reading frame of SEQ ID NO: 35 or to the nucleic acid encoding SEQ ID NO: 34. Accordingly, Roy *et al.* do not anticipate the claimed invention. Applicant respectfully requests withdrawal of the rejection.

#### Conclusion


Applicant respectfully requests entry of the amendments, reconsideration, and the timely allowance of the pending claims. A favorable action is awaited. Should the Examiner find that an interview would be helpful to further prosecution of this application, they are invited to telephone the undersigned at their convenience.

If there are any additional fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time

under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,  
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